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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

TORRES, JOSEPH D

ART UNIT PAPER NUMBER

2133

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/716,787

Applicant(s)

CHAPMAN, JOSEPH QUINN

Examiner

Joseph D. Torres

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 70-74,80-83 and 103-107 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 70-74,80-83 and 103-107 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 70-74 and 80-83 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 71, 73 and 103-107 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 71 recites the limitation "the parameter" in line 3. There is insufficient antecedent basis for this limitation in the claim.

The Examiner assumes --a parameter-- was intended.

Claim 73 recites the limitation "the parameter" in line 3. There is insufficient antecedent basis for this limitation in the claim.

The Examiner assumes --a parameter-- was intended.

Claim 103 recites the limitation "the parameter" in line 2. There is insufficient antecedent basis for this limitation in the claim.

The Examiner assumes --a parameter-- was intended.

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Claim 104 recites the limitation "the parameter" in line 2. There is insufficient antecedent basis for this limitation in the claim.

The Examiner assumes --a parameter-- was intended.

Claim 105 recites the limitation "the parameter" in line 2. There is insufficient antecedent basis for this limitation in the claim.

The Examiner assumes --a parameter-- was intended.

Claim 106 recites the limitation "the means for calculating" in line 1. There is insufficient antecedent basis for this limitation in the claim.

The Examiner assumes --a means for calculating-- was intended.

Claim 106 recites the limitation "the value" in line 1. There is insufficient antecedent basis for this limitation in the claim.

The Examiner assumes --a value-- was intended.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claims 70-72, 80-83 and 103-107 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pregont; Gary J. et al. (US 5351245 A, hereafter referred to as Pregont) in view of Averbuch; Nimrod (US 5268933 A).

35 U.S.C. 103(a) rejection of claim 70.

Pregont teaches a receiver for developing a received signal (Transceiver 101 in Figure 1 of Pregont is communication device comprising a Receiver 111); and a digital signal processor (Transceiver 101 in Figure 1 of Pregont is communication device comprising a DSP 115; Note col. 2, lines 30-32 of Pregont teach that the processing system is substantially a DSP since it is comprised of a DSP), where said DSP comprises: layer one logic configured to perform OSI layer one processing (col. 3, lines 11-13 in Pregont teaches that RCH frames are comprised of layer one control bits; col. 4, lines 23-42 in Pregont teach that DSP 115 is digital logic for encoding and processing RCH frame data; hence DSP 115 is comprised of layer one logic configured to perform OSI layer one processing); and frame check sequence logic configured to compute a frame check sequence (FCS) on each frame of said received signal, wherein the layer one logic has access to said frame check sequence (CRC 321 is substantially a frame check sequence for checking the integrity of the RCH frames).

However Pregont does not explicitly teach the specific use of said receiver comprises an adaptive device having at least one operating parameter.

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Averbuch, in an analogous art, teaches use of said receiver comprises an adaptive device having at least one operating parameter (col. 4, lines 61-68 in Averbuch teaches that the receiver in Figure 2 of Averbuch is a DSP; Note: a DSP is an adaptive device subject to at least one operating parameter; col. 5, lines 1-14 in Averbuch teaches that the DSP of Figure 2 is subject to a CRC operating parameter).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Pregont with the teachings of Averbuch by including use of said receiver comprises an adaptive device having at least one operating parameter. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that use of said receiver comprises an adaptive device having at least one operating parameter would have provided a readily available processor, the Motorola 56001, for implementing the processor in Pregont.

35 U.S.C. 103(a) rejection of claims 71 and 107.

A count is a parameter and a counter is a means for calculating and storing a current count. Step 515 Figure 5 in Pregont teaches a counter for calculating and storing a count parameter. If the received signal is error free the same count parameter as before is stored in the counter.

35 U.S.C. 103(a) rejection of claim 72.

A count is a parameter and a counter is a means for calculating and storing a current count. Step 515 Figure 5 in Pregont teaches a counter for calculating and storing a count parameter. The counter uses the existing count parameter if an error is found and increments the existing count parameter by 1.

35 U.S.C. 103(a) rejection of claims 80-83.

Claims 80-83 are intended use claims and do not result in any structural change to claim 70. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

35 U.S.C. 103(a) rejection of claims 103-106.

A count is a parameter and a counter is a means for calculating and storing a current count. Step 515 Figure 5 in Pregont teaches a counter for calculating and storing a count parameter. The counter uses the existing count parameter if an error is found and increments the existing count parameter by 1. Note: a counter is means for calculating a value for the parameter; means for storing the calculated last-known count

value as a last known good value if a message received from a remote device indicates the calculated value is acceptable; means for updating the parameter with the last-known good count value if the frame check sequence indicates that said received signal is error free; and means for updating the parameter with the most recently calculated value if the frame check sequence indicates that the received signal contains errors.

4. Claims 73 and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pregont; Gary J. et al. (US 5351245 A, hereafter referred to as Pregont) and Averbuch; Nimrod (US 5268933 A) in view of Chow; Jacky S. et al. (US 5623513 A, hereafter referred to as Chow).

35 U.S.C. 103(a) rejection of claims 73 and 74.

Pregont and Averbuch substantially teaches the claimed invention described in claim 70-72 and 107 (as rejected above).

However Pregont and Averbuch does not explicitly teach the specific use of a means for saving an existing parameter responsive to an FEC for an echo canceller.

Chow, in an analogous art, teaches use of a means for saving an existing parameter responsive to the FEC (col. 13, lines 22-36 in Chow teaches FEC 68 in the Echo Canceller 58 of Figure 7 is used to compute new coefficients; Note: coefficients are stored tap values used in an equalizer filter).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Pregont and Averbuch with the teachings of Chow by

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including use of a means for saving an existing parameter responsive to the FEC. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that use of a means for saving an existing parameter responsive to the FEC would have provided an adaptive means for adjusting tap coefficients (col. 13, lines 22-36 in Chow).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Torres whose telephone number is (571) 272-3829. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**JOSEPH TORRES
PRIMARY EXAMINER**

Joseph D. Torres, PhD
Primary Examiner
Art Unit 2133